US ERA ARCHIVE DOCUMENT

# Clean Air Act (CAA) Implementation in Florida

Corrections Environmental Workshop
Tallahassee, FL
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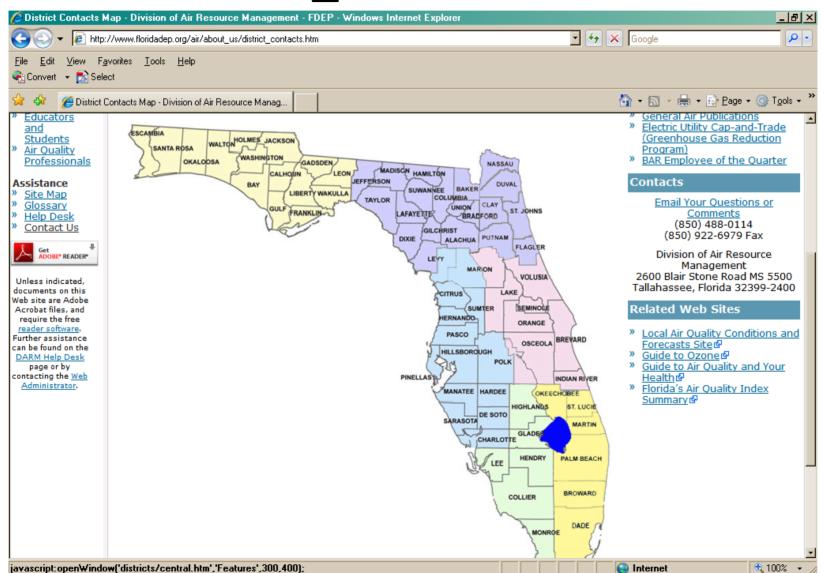
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# Regulatory Agencies

- U.S. Environmental Protection Agency (USEPA)
  - Headquarters in Washington, D.C.
  - Office of Air Quality Planning and Standards (OAQPS) in Research Triangle Part, N.C.
  - EPA Region 4 (Southeast), Atlanta, Georgia
- Florida Dept. of Environmental Protection (FDEP)
  - Headquarters in Tallahassee
  - 6 District Offices around the State

(Pensacola, Jacksonville, Orlando, Tampa, W. Palm Beach, Ft. Myers)

# http://www.floridadep.org/air/about\_us/district\_contacts.htm

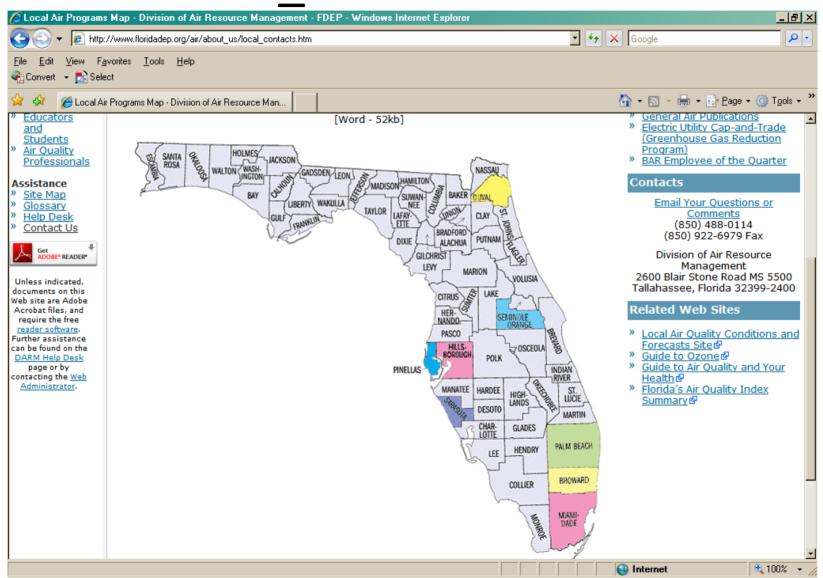


# Regulatory Agencies (cont'd)

### 8 contracted Local Air Programs

- City of Jacksonville (Duval County)
- Palm Beach County
- Broward County
- Miami-Dade County
- Sarasota County
- Pinellas County
- Hillsborough County
- Orange County

# http://www.floridadep.org/air/about\_us/local\_contacts.htm



# Rules, Rules

- U.S. Environmental Protection Agency (USEPA)
  - Clean Air Act (CAA)
  - Code of Federal Regulations (CFR)
- Florida Dept. of Environmental Protection (FDEP)
  - Florida Statutes (F.S.)
  - Florida Administrative Code (F.A.C.)
- County/City Environmental Programs
  - County/City Ordinances

### Who needs an Air Permit?

Unless exempted from permitting pursuant to this rule (62-210.300, F.A.C.) or Rule 62-4.040, F.A.C., the owner or operator of any facility or emissions unit which emits or can reasonably be expected to emit any air pollutant shall obtain appropriate authorization from the Department prior to undertaking any activity at the facility or emissions unit for which such authorization is required.

62-210.300, F.A.C., Permits Required. (http://www.dep.state.fl.us/air/rules/fac/62-210.pdf)

# What needs an Air Permit? (cont'd)

"Air Pollutant" – Any substance (particulate, liquid, gaseous, organic or inorganic) which if released, allowed to escape, or emitted, whether intentionally or unintentionally, into the outdoor atmosphere may result in or contribute to **air pollution**.

Rule 62-210.200(20), F.A.C. (<a href="http://www.dep.state.fl.us/air/rules/fac/62-210.pdf">http://www.dep.state.fl.us/air/rules/fac/62-210.pdf</a>)

### What needs an Air Permit?

"Air Pollution" – The presence in the outdoor atmosphere of the state of any one or more substances or pollutants in quantities which are or may be harmful or injurious to human health or welfare, animal or plant life, or property, or unreasonably interfere with the enjoyment of life or property, including outdoor recreation.

Rule 62-210.200(21), F.A.C. (http://www.dep.state.fl.us/air/rules/fac/62-210.pdf)

# What needs an Air Permit? (cont'd)

### "Regulated Air Pollutant" -

- (a) Nitrogen oxides (NOx) or volatile organic compounds (VOC);
- (b) Any pollutant regulated under 42 U.S.C. s. 7411 Standards of Performance for New Stationary Sources, or 42 U.S.C. s. 7412 Hazardous Air Pollutants; or
- (c) Any pollutant for which a national primary ambient air quality standard has been specified at 40 C.F.R. Part 50, adopted and incorporated by reference in Rule 62-204.800, F.A.C.
- (d) Any pollutant listed at 40 CFR Part 82, Subpart A, Appendix A or B, adopted and incorporated by reference at Rule 62-204.800, F.A.C.

Rule 62-210.200(20), F.A.C. (http://www.dep.state.fl.us/air/rules/fac/62-210.pdf)

## **Examples of Regulated Air Pollutants**

- Volatile Organic Compounds
- Nitrogen Oxides
- Sulfur Dioxide
- Sulfuric Acid Mist
- Fluorides
- Particulate Matter (PM, PM<sub>10</sub>, PM<sub>2.5</sub>)
- Carbon Monoxide
- Lead, Mercury and 185 other Hazardous Air
   Pollutants (HAP) that include metals and organics
- Stratospheric Ozone Destroyers (e.g. CFCs)

### **Permit Exemptions**

- Categorical and Conditional Exemptions [37 of these]
   62-210.300(3)(a), F.A.C.
- Generic and Temporary Exemptions 62-210.300(3)(b), F.A.C.
- 62-4 Exemptions
   62-4.040(1)(b), F.A.C.
- Authorization by Air General "Permits" 62-210.300(4), F.A.C.

(http://www.dep.state.fl.us/air/rules/fac/62-210.pdf)

# 62-210.300(3)(a), F.A.C., Categorical and Conditional Exemptions

#### **Examples of Categorical Exemptions**

- Internal combustion engines in boats, aircraft and vehicles used for transportation of passengers or freight.
- Brazing, soldering or welding equipment.

#### **Examples of Conditional Exemptions**

- Degreasing units using heavier-than-air vapors exclusively, provided that such units shall not use any substance containing any hazardous air pollutant.
- Petroleum dry cleaning facilities, **provided** the solvent consumption shall be less than 3,250 gallons per year.

# 62-210.300(3)(a), F.A.C., Categorical and Conditional Exemptions (cont'd)

#### **Examples of Conditional Exemptions (cont'd)**

- Surface coating operations within a single facility, provided:
- a. The surface coating operation shall use only coatings containing 5.0 percent or less VOC, by volume, or the total quantity of coatings containing greater than 5.0 percent VOC, by volume, used at the facility shall not exceed 6.0 gallons per day, averaged monthly, where the quantity of coatings used includes all solvents and thinners used in the process or for cleanup; and
- b. Such operations are not subject to any unit-specific applicable requirement.

# 62-210.300(3)(a), F.A.C., Categorical and Conditional Exemptions (cont'd)

#### **Examples of Conditional Exemptions (cont'd)**

#### **Printing operations**, provided:

- a. The facility is not subject to any unit-specific applicable requirement;
- b. The facility shall use less than 667 gallons of materials containing any hazardous air pollutants in any consecutive twelve (12) months; and
- c. The facility shall:
- (I) Operate only **heatset offset lithographic** printing lines and use less than 20,000 pounds, combined, of inks, cleaning solvents, fountain solution concentrate and fountain solution additives in any consecutive twelve (12) months;
- (II) Operate only **non-heatset offset lithographic** printing lines and use less than 2,850 gallons, combined of cleaning solvents, fountain solution concentrate and fountain solution additives in any consecutive twelve (12) months;
- (III) Operate only **digital** printing lines and use less than 2,425 gallons, combined, of solvent based inks, cleanup solutions, and other solvent-containing materials in any consecutive twelve (12) months;
- (IV) Operate only **screen or letterpress** printing lines and use less than 2,850 gallons, combined, of solvent based inks, clean-up solutions, and other solvent-containing materials in any consecutive twelve (12) months;
- (V) Operate only water-based or ultraviolet-cured-material flexographic or rotogravure printing lines and use less than 80,000 pounds, combined, of water-based inks, coatings, and adhesives in any consecutive twelve (12) months; or
- (VI) Operate only **solvent-based material flexographic or rotogravure** printing lines and use less than 20,000 pounds, combined, of inks, dilution solvents, coatings, cleaning solutions, and adhesives in any consecutive twelve (12) months.

## "Unit-Specific Applicable Requirement"

#### An applicable requirement that applies specifically to a given emissions unit;

- however, for purposes of subsection 62-210.300(3), subparagraph 62-213.300(2)(a)1. and paragraph 62-213.430(6)(b), F.A.C., applicable requirements which are not considered unit-specific applicable requirements include the following:
- (a) Any subpart of 40 C.F.R. Part 60, 61, or 63 that imposes nothing more than a recordkeeping or reporting requirement on an emissions unit;
- (b) 40 CFR Part 61, Subpart M National Emission Standard for Asbestos, Section 61.145, Standard for Demolition and Renovation;
- (c) Subsection 62-296.320(2), F.A.C., Objectionable Odor Prohibited;
- (d) Subsection 62-296.320(3), F.A.C., Industrial, Commercial, and Municipal Open Burning Prohibited;
- (e) Paragraph 62-296.320(4)(b), F.A.C., General Visible Emissions Standard, except subparagraph 62296.320(4)(b)2., F.A.C.;
- (f) Paragraph 62-296.320(4)(c), F.A.C., Unconfined Emissions of Particulate Matter;
- (g) Rule 62-4.160, F.A.C., except subsection 62-4.160(13), F.A.C.; and
- (h) Any standard or other requirement under Chapters 62-252, 62-256, 62-257, and 62-281, F.A.C.

Rule 62-210.200(322), F.A.C. (http://www.dep.state.fl.us/air/rules/fac/62-210.pdf)

#### 62-210.300(3)(b), F.A.C., Generic and Temporary Exemptions

- (1) An **emissions unit or pollutant-emitting activity** is exempt from air permitting if it meets all the following criteria:
- a. It would be subject to no unit-specific applicable requirement.
- b. It would neither emit nor have the **potential to emit**:
  - (I) 500 pounds per year or more of lead and lead compounds expressed as lead;
  - (II) 1,000 pounds per year or more of any hazardous air pollutant;
  - (III) 2,500 pounds per year or more of total hazardous air pollutants; or
  - (IV) 5.0 tons per year or more of any other regulated pollutant.
- c. Its emissions, in combination with the emissions of other units and activities at the facility, would not cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.
- d. In the case of a proposed new emissions unit at an existing facility, the emissions of such unit, in combination with the emissions of any other proposed new or modified units and activities at the facility, would not result in a modification subject to the preconstruction review requirements of subparagraph 62-204.800(11)(d)2., Rule 62-212.400 or 62-212.500, F.A.C.
- e. In the case of a proposed new pollutant-emitting activity, such activity would not constitute a modification of any existing non-exempt emissions unit at a non-Title V source or any existing non-insignificant emissions unit at a Title V source.

#### 62-210.300(3)(b), F.A.C., Generic and Temporary Exemptions

- (2) A **facility** is exempt from air permitting if it meets all the following criteria:
- a. No emissions unit or pollutant-emitting activity within the facility would be subject to any unit-specific applicable requirement.
- b. The facility would neither emit nor have the potential to emit:
  - (I) 1,000 pounds per year or more of lead and lead compounds expressed as lead;
  - (II) 1.0 ton per year or more of any hazardous air pollutant;
  - (III) 2.5 tons per year or more of total hazardous air pollutants;
  - (IV) 25 tons per year or more of carbon monoxide, nitrogen oxides and sulfur dioxide; or
  - (V) 10 tons per year or more of any other regulated pollutant.
- c. The facility would neither emit nor have the potential to emit any pollutant in such amount as to make the facility a Title V source, nor would the facility be a Title V source for any other reason.

#### "Potential to Emit"

The **maximum** capacity of an emission unit or facility to emit a pollutant under its physical and operational design.

Any physical or operational limitation on the capacity of the emissions unit or facility to emit a pollutant,

including

air pollution <u>control equipment</u> and <u>restrictions</u> on hours of operation or on the type or amount of material combusted, stored, or processed,

shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.

Secondary emissions do not count in determining the potential to emit of an emission unit or facility.

62-210.200(245), F.A.C. (<a href="http://www.dep.state.fl.us/air/rules/fac/62-210.pdf">http://www.dep.state.fl.us/air/rules/fac/62-210.pdf</a> )

# **Estimating Emissions**

- Material Data Safety (MSD) Sheets
- Material Balances
- AP 42, Fifth Edition Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources

(http://www.epa.gov/ttn/chief/ap42/index.html)

Example chapters:

**Internal Combustion Sources** 

(http://www.epa.gov/ttn/chief/ap42/ch03/index.html)

**Evaporation Loss Sources** 

(<a href="http://www.epa.gov/ttn/chief/ap42/ch04/index.html">http://www.epa.gov/ttn/chief/ap42/ch04/index.html</a>)

### **62-4.040(1)(b), F.A.C., Permit Exemptions**

- Any existing or proposed installation which the Department shall determine does not or will not cause the issuance of air or water contaminants in sufficient quantity, with respect to its character, quality or content, and the circumstances surrounding its location, use and operation, as to contribute significantly to the pollution problems within the State, so that the regulation thereof is not reasonably justified.
- Such a determination is agency action and is subject to Chapter 120, F.S.
- Such determination shall be made in writing and filed by the Department as a public record.
- Such determination may be revoked if the installation is substantially modified or the basis for the exemption is determined to be materially incorrect.

(http://www.dep.state.fl.us/air/rules/fac/62-4.pdf)

## Authorization by Air General "Permits"

- Certain facilities may use an air general permit as specified in Rules 62-210.310 and 62-213.300, F.A.C.
- The owner or operator of any eligible facility
  - who registers to use an air general permit under either of these rules,
  - who is not denied use of the air general permit, and
  - who operates the facility in compliance with the terms and conditions of the air general permit

shall not be required to obtain an air construction permit pursuant to subsection 62-210.300(1), F.A.C., or an air operation permit pursuant to subsection 62-210.300(2), F.A.C., or Rule 62-213.400, F.A.C.

#### **General "Permits" Available**

http://www.dep.state.fl.us/air/rules/forms/forms\_agp.htm

- Bulk Gasoline Plant
- Reciprocating Internal Combustion Engine
- Surface Coating Operations
- Reinforced Polyester Resin Fabrication (e.g., fiberglass products)
- Cast Polymer Operation
- Printing Operations
- Volume Reduction, Mercury Recovery, or Mercury Reclamation
- Concrete Batching Plant
- Human Crematory
- Animal Crematory
- Nonmetallic Mineral Processing Plant

- Perchloroethylene Dry Cleaner
- Ethylene Oxide
   Sterilizer
- Halogenated Solvent Degreasers
- Chromium
   Electroplating and
   Anodizing
- Secondary Aluminum
   Sweat Furnace

# **Types of Air Permits**

- Air Construction Permits
  - Minor
  - Prevention of Significant Deterioration (PSD)
- Air Operation Permits
  - Minor
  - Federally-Enforceable State Op. Permit (FESOP)
     [FESOPS can be issued without a prior construction permit]
  - Title V Source [Major Source of Air Pollution]

# **Applying for a Permit**

- Application forms with detailed instructions found on website: <a href="http://www.dep.state.fl.us/air/rules/forms/ap">http://www.dep.state.fl.us/air/rules/forms/ap</a> plication.htm
- Rules regarding permits required
   62-210.300, F.A.C.
   (<a href="http://www.dep.state.fl.us/air/rules/fac/62-210.pdf">http://www.dep.state.fl.us/air/rules/fac/62-210.pdf</a>)

# State Air Regulations (F.A.C. Chapters)

http://www.dep.state.fl.us/air/rules/current.htm

| 62-4   | Permits   |
|--------|---|
| 62-204 | Air Pollution Control – General Provisions                        |
| 62-210 | Stationary Sources – General Requirements                         |
| 62-212 | Stationary Sources – Preconstruction Review                       |
| 62-213 | Operation Permits for Major Sources of Air Pollution              |
| 62-214 | Requirements for Sources Subject to the Federal Acid Rain Program |
| 62-243 | Tampering with Motor Vehicle Air Pollution Control Equipment      |
| 62-252 | Gasoline Vapor Control  |
| 62-256 | Open Burning  |
| 62-257 | Asbestos Program  |
| 62-285 | Greenhouse Gas Emissions Reduction                                |
| 62-296 | Stationary Sources Emission Standards                             |
| 62-297 | Stationary Sources Emissions Monitoring                           |
|        |   |

# Code of Federal Regulations (CFR) [Air Regulations likely to show up in permits]

Go to <a href="http://ecfr.gpoaccess.gov/">http://ecfr.gpoaccess.gov/</a> then select "Title 40"

#### Title 40 Protection of Environment

- Part 60 Standards of Performance for New Stationary Sources (NSPS)
- Part 61 National Emissions Standards for Hazardous Air Pollutants (Part 61 NESHAP)
- Part 63 National Emission Standards for Hazardous Air Pollutants for Source Categories (NESHAP MACT)
- Part 64 Compliance Assurance Monitoring (CAM)
- Part 70 State Operating Permit Programs (Title V)
- Other Part 70s: Acid Rain and Continuous Emissions Monitoring (CEMS)
- Part 82 Protection of Stratospheric Ozone

# Example Subparts of 40 CFR Part 60 Regulations

- Db Industrial/Commercial/Institutional Steam Generating Units (Boilers)
- Dc Small Industrial/Commercial/Institutional Steam Generating Units (Boilers)
- E Incinerators
- Kb Volatile Organic Liquid Storage Vessels
- DD Grain Elevators
- EE Surface Coating of Metal Furniture
- GG Stationary Gas Turbines
- QQ Graphic Arts Publication Rotogravure Printing
- IIII Stationary Compression Ignition Internal Combustion Engines
- JJJJ Stationary Spark Ignition
   Internal Combustion Engines

# Example Subparts of 40 CFR Part 63 Regulations for Area Sources

- WWWWW Hospital Ethylene Oxide Sterilizers
- CCCCCC Gasoline Dispensing Facilities
- HHHHHH Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources
- QQQQQQ Wood Preserving Area Sources
- VVVVVV Chemical Manufacturing Area Sources
- WWWWWW Plating and Polishing Operations
- BBBBBB Chemical Preparations Industry
- CCCCCCC Paints and Allied Products Manufacturing

### Some Things that Affect Rule Applicability

- Age of emissions unit "existing" vs. "new" (When was it "constructed"?)
- Type of emissions unit
- Type of facility
- Capacity of unit
- Potential emissions (major vs. minor/area)
- Designation of Air Quality where unit is located
- County where emissions unit is located

# **Questions?**

Contact Air Program Office for your area or

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